

**NYU Stern School of Business**  
**Department of Information, Operations & Management Sciences**  
**OPERATIONS MANAGEMENT RESEARCH SEMINAR**

**TOPIC: Serving Heterogeneous Buyers through Price and Effort Differentiation**

**SPEAKER: Raj Rajagopalan (USC)**

**DATE: Wednesday, March 23, 2016**

**TIME: 11:00 AM-12:00PM**

**PLACE: KMC 3-60**

**ABSTRACT**

Professional services involve a high degree of information asymmetry: a service provider may have little information about a buyer's valuation ex ante, and the buyer may have limited ability to verify a service provider's effort ex post. We investigate the performance of three commonly used pricing schemes—flat fee, hourly-rate contract, and two-part tariff—in service environments where the buyer's valuation is invisible to the service provider and the provider's effort may or may not be visible to the buyer. In the private effort environment, we further distinguish between situations where the contract may be based on the outcome or on the effort reported by the provider. We show that under two-part tariff, the worst situation for the provider is contracting on outcome when effort is private. Under an hourly-rate contract, the provider may be better (worse) off in keeping effort private and contracting on reported effort than making it public when the cost of providing service is low (high); the trade-off is also affected by the degree of outcome uncertainty in a non-monotonic way. We also find that hourly-rate contracts can do as well as two-part tariffs over a sizable parameter regime when effort is private and outcome is non-contractible.

**BIO**

S. "Raj" Rajagopalan is a Professor in the Data Sciences and Operations Department in the Marshall School of Business at the University of Southern California (USC). He was Chair of the Department from 2000 – 2004 and Academic Director of the MS in Global Supply Chain Program from 2013-15. He holds a Ph.D. in Operations and Technology Management from Carnegie Mellon University, and degrees from the Indian Institute of Management, Ahmedabad, India, and the Indian Institute of Technology, Madras, India. He has taught for over 25 years at USC in the Executive MBA, Executive and MBA programs and has won awards for his teaching. His research interests include capacity planning, supply chain management, pricing of services and process and quality improvement. He has published numerous research articles on these topics in leading journals such as Management Science, Operations Research, MSOM and Production and Operations Management. He has served as an Associate Editor at these journals and as a Department Editor for IIE Transactions. He has consulted in areas such as supply chain management, revenue maximization, process improvement, production and staff planning, forecasting and logistics for multinationals.